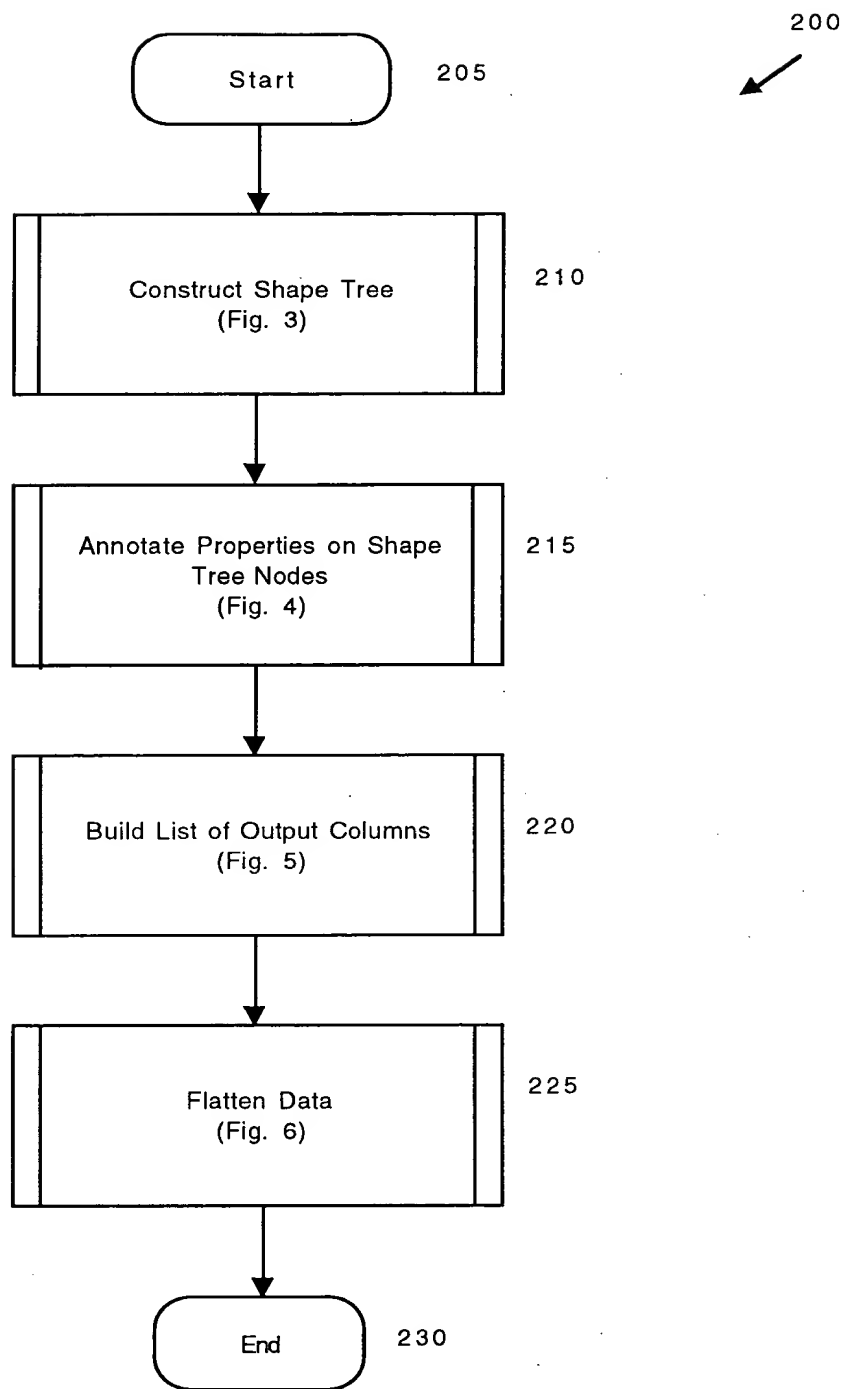


FIG. 1

10Fig

00ET/0"506ST960



**Fig. 2**

## Construct Shape Tree

210

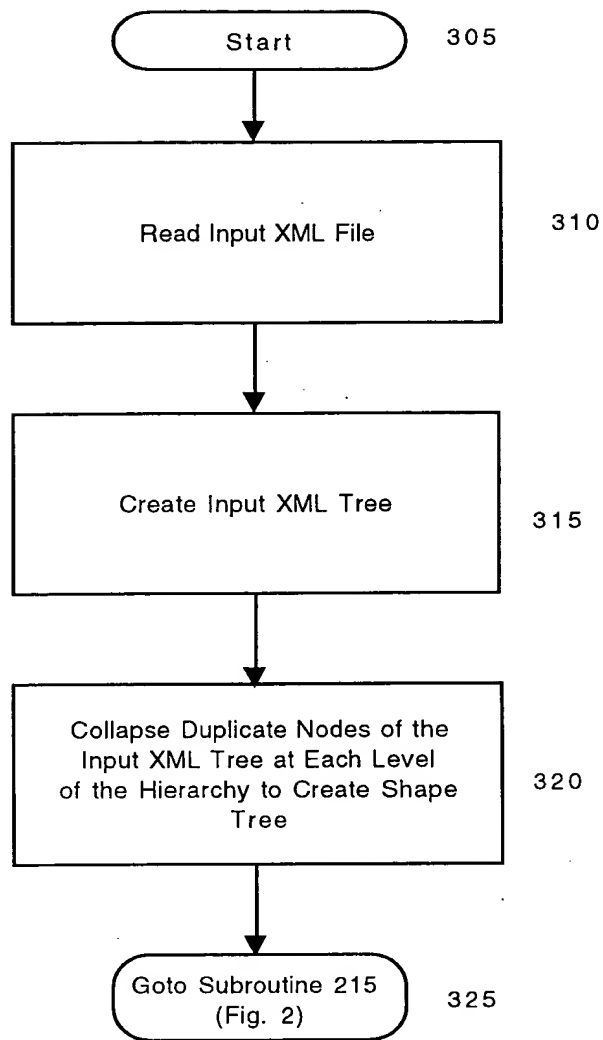


Fig. 3

09615905-071300  
00ET20"5065T960



# Build List of Output Columns

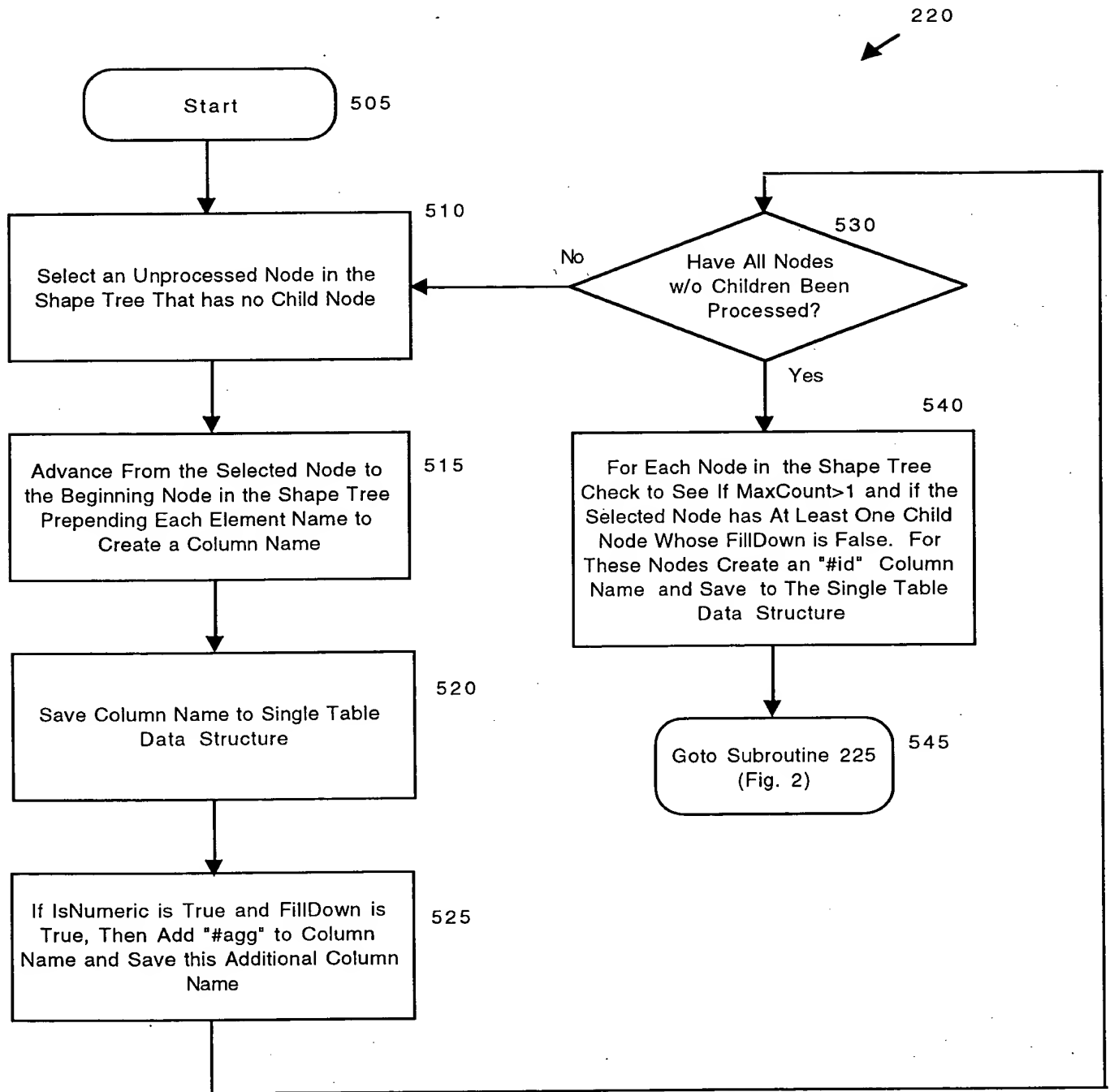


Fig. 5

# Flatten Data

225

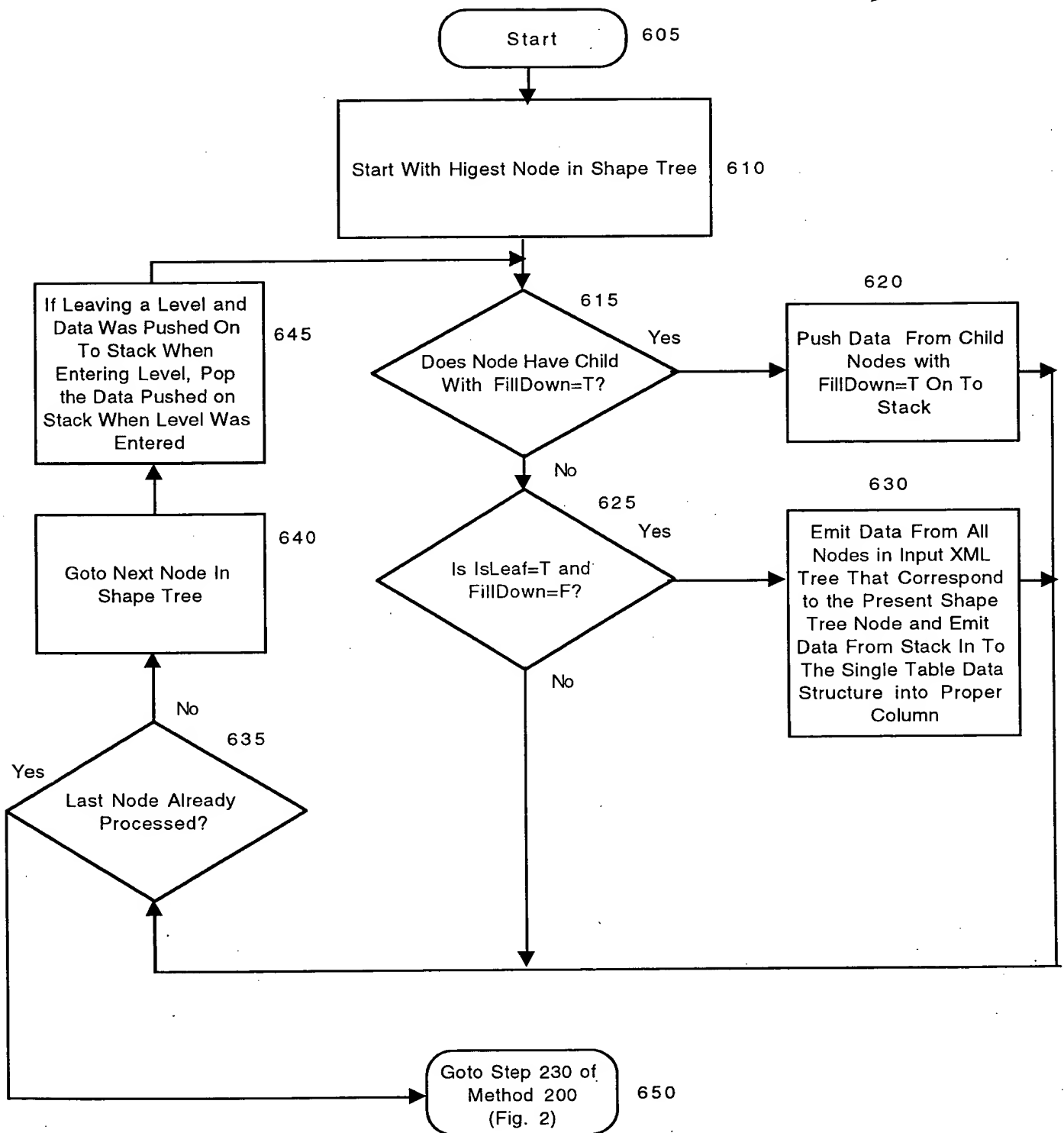


Fig. 6

[illegible]

137

<A>			-705
	<B>b1</B>		-710
	<B>b2</B>		-715
	<B>b3</B>		-720
	<C>		-725
		<D>d1</D>	-730
		<D>d2</D>	-735
		<E>e</E>	-740
	</C>		-745
	<F>7.95</F>		-750
	<C>		-755
		<D>d3</D>	-760
	</C>		-765
</A>			-770

**Fig. 7**

# Input XML Tree

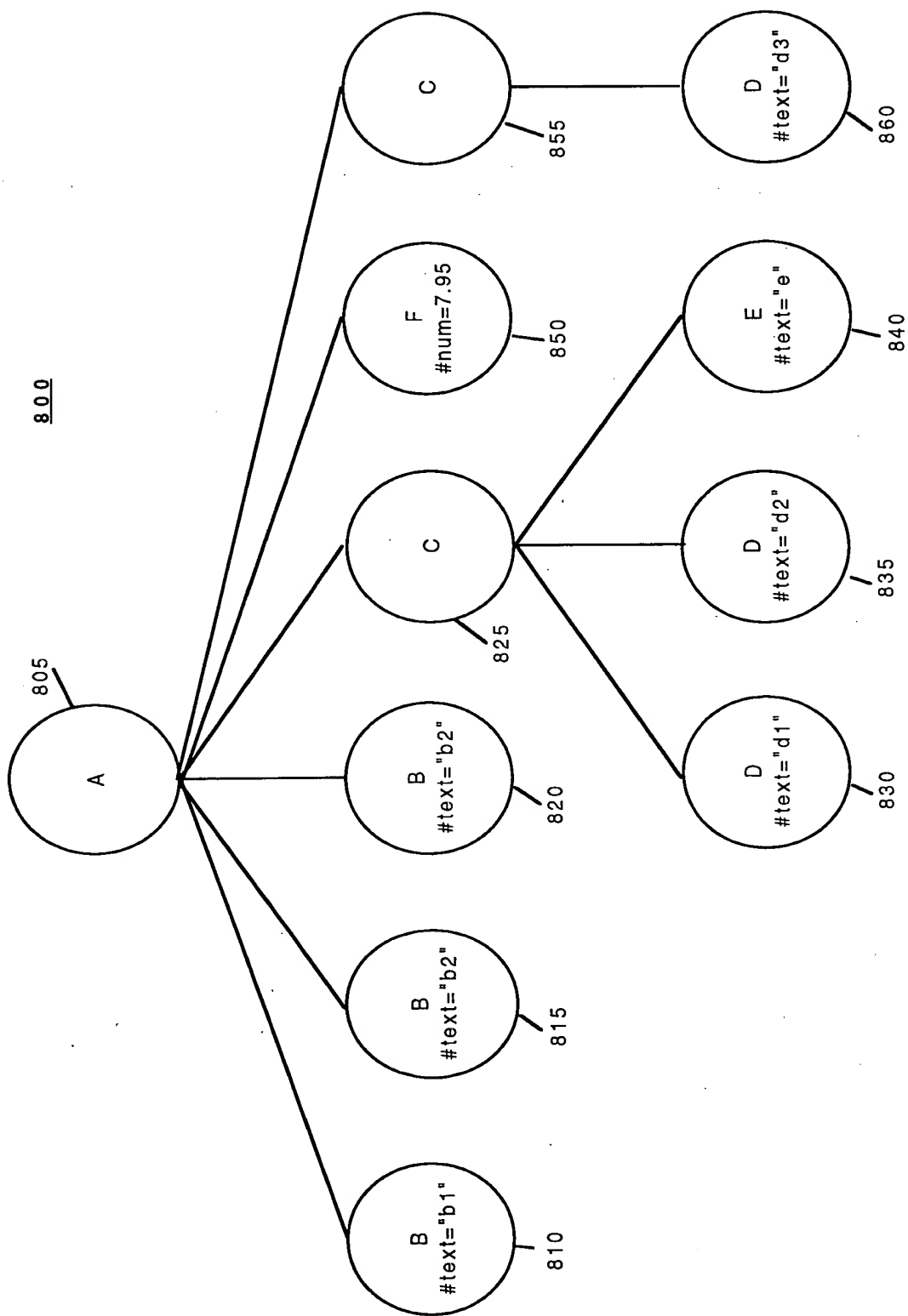


Fig. 8



# Shape Tree

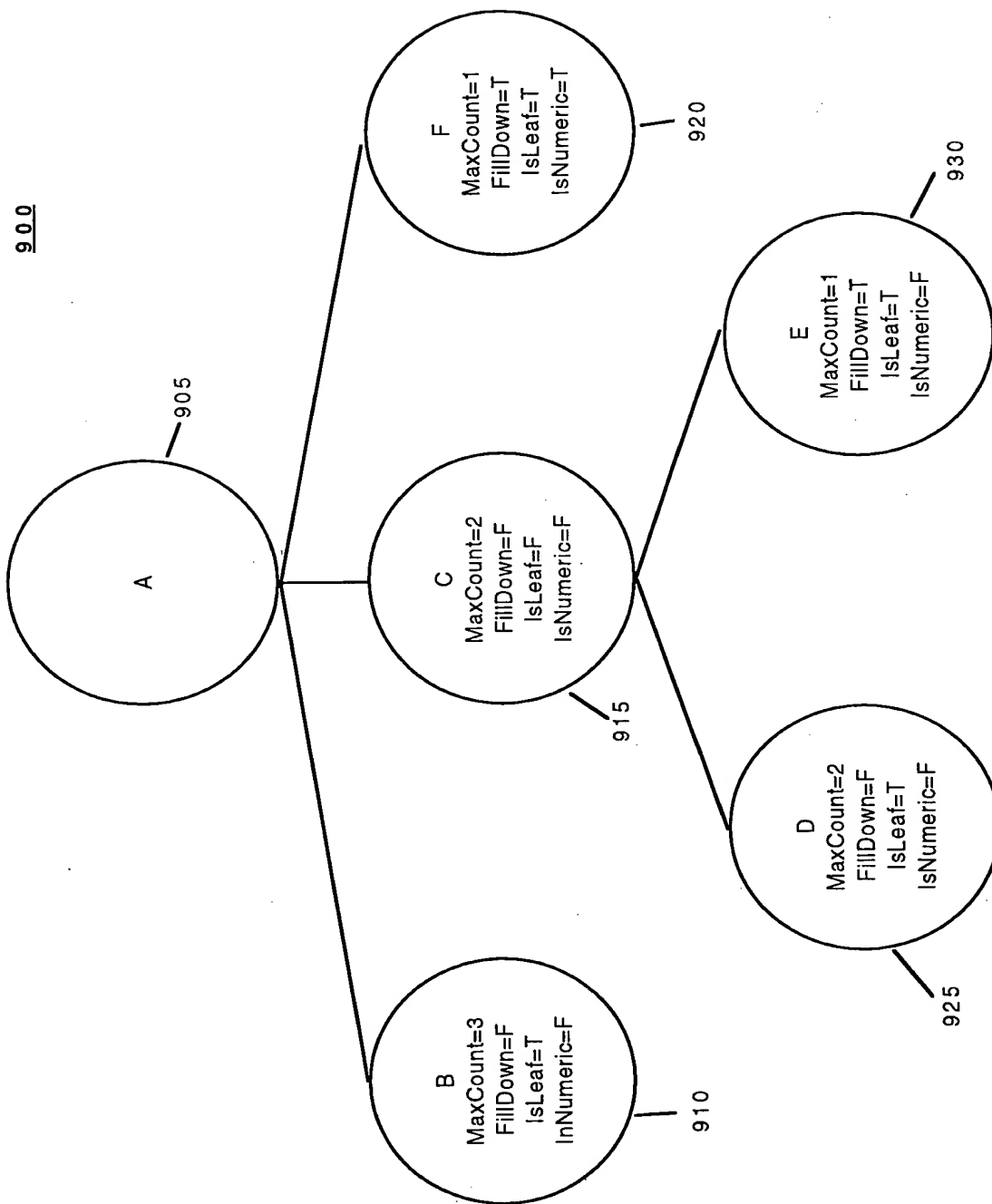


Fig. 9

Flat Data Structure

	1040	1045	1050	1055	1066	1065
1005---	/A/B/#text	/A/C/#id	/A/C/D/#text	/A/C/E/#text	/A/F/#num	/A/F/#agg
1010---	b1				7.95	7.95
1015---	b2				7.95	
1020---	b3				7.95	
1025---		1 d1		e	7.95	
1030---		1 d2		e	7.95	
1035---		2 d3			7.95	

Fig. 10